

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-20 (Cancelled).

21. (Currently Amended) A method for locating a terminal in a local wireless telecommunications network performed at a locating system that provides a location estimation of the terminal depending on a set of configuration data and on a set of measuring data, wherein the network comprises a plurality of base stations providing services on a plurality of coverage areas and the locating system is located remotely from the terminal and the plurality of base stations, comprising:

defining a set of configuration data comprising a plurality of configuration data base entries, each configuration data base entry having a weight function;

acquiring a set of measuring data from the terminal or the network comprising a plurality of measuring data types, wherein each measuring data type depends on the type of terminal and the set of measuring data indicates whether the terminal belongs to a subset of said plurality of coverage areas;

associating each of a plurality of locating procedures with a different combination of at least one of the plurality of configuration data base entries and at least one of the plurality of measuring data types, wherein each of the plurality of locating procedures corresponds to an accuracy value of the location estimation; and

selectively actuating at least one of the plurality of locating procedures obtained from said associating step to provide the location estimation.

22. (Previously Presented) The method according to claim 21, wherein said selectively actuating comprises selecting one of the plurality of locating procedures depending on a set of available measuring data and on a prefixed accuracy threshold value of the location estimation, in such a way that said one of the plurality of locating procedures has an accuracy value that is not less than the prefixed threshold value, minimising the weight function of the at least one of the plurality of configuration data base entries associated with said one of the plurality of locating procedures.

23. (Previously Presented) The method according to claim 21, wherein said selectively actuating comprises selecting one of the plurality of locating procedures depending on a set of available measuring data and on a prefixed set of available configuration data, in such a way that said one of the plurality of locating procedures has the best possible accuracy value of the location estimation.

24. (Previously Presented) The method according to claim 21, wherein said selectively actuating comprises selecting one of the plurality of locating procedures depending on a set of available measuring data and on a prefixed set of available configuration data, in such a way that said one of the plurality of locating procedures has the best response speed to the location estimation request.

25. (Previously Presented) The method according to claim 21, wherein said selectively actuating comprises a step of selecting one of the plurality of locating procedures depending on a set of available measuring data and on a prefixed set of

available configuration data, in such a way that said one of the plurality of locating procedures has a pricing value in compliance with a value predefined by a user.

26. (Previously Presented) The method according to claim 21, wherein said set of configuration data comprises at least one configuration data base entry among the plurality of configuration data base entries related to:

- locating coordinates of the base stations;
- radio-electric characteristics of the network;
- structural and/or electromagnetic characteristics of the environment in which the network is deployed; and
- radio-electric or performance parameters of signals transmitted from the base stations, in predetermined space positions belonging to the coverage area of the network.

27. (Previously Presented) The method according to claim 21, wherein said set of measuring data acquired by the terminal or the network comprises at least one measuring data type among the plurality of measuring data types related to:

- identification of the base station by which the terminal is served;
- identification of the base stations received by the terminal;
- at least one radio-electric or performance parameter of signals transmitted from the base station by which the terminal is served; and
- at least one radio-electric or performance parameter of signals transmitted by the base stations received by the terminal.

28. (Previously Presented) The method according to claim 22, further comprising temporarily excluding a set of configuration data from said plurality of configuration data base entries.

29. (Previously Presented) The method according to claim 21, further comprising transferring, to the terminal of the network, of processing programs for performing at least one subset of said plurality of locating procedures and at least one subset of said plurality of configuration data base entries used by the transferred locating procedures, whereby the location estimation is performed by the terminal and information about estimated position and estimation accuracy are transmitted from the terminal to the locating system upon every service request.

30. (Previously Presented) The method according to claim 29, wherein a synthesis or model of the at least one subset of said plurality of configuration data base entries is transferred.

31. (Previously Presented) The method according to claim 29, wherein the selection of the at least one subset of said plurality of locating procedures that can be performed by the terminal occurs depending on measures that the terminal is able to perform and/or the required locating accuracy and/or the applied pricing when using the terminal.

32. (Previously Presented) The method according to claim 21, further comprising creating and maintaining a data base for storing a time succession of estimated positions of the terminal.

33. (Previously Presented) The method according to claim 21, wherein at least one of the plurality of locating procedures associated with a combination of at least one of the plurality of configuration data base entries and at least one of the plurality of measuring data types estimates the position of the terminal corresponding to the barycenter coordinates of the coverage area of said base station and an uncertainty value, the uncertainty value being defined by the distances from said barycenter to all points of the coverage area, wherein the at least one of the plurality of configuration data base entries relates to locating coordinates of the base stations, locating coordinates of the base stations and radio electric characteristics of the network, or locating coordinates of the base stations and radio electric characteristics of the network and the structural/electromagnetic characteristics in which the network is deployed, and the at least one of the plurality of measuring data types relates to the identification of the base station by which the terminal is being served.

34. (Previously Presented) The method according to claim 33, wherein the at least one of the plurality of locating procedures estimates the position of the terminal corresponding to the barycenter coordinates of a coverage sub-area of the base station by which the terminal is served comprising the points nearer to the base stations received by the terminal with respect to unreceived base stations and an uncertainty value, the uncertainty value being defined depending on the distances from said barycenter to all points of the sub-area, and the at least one of the plurality of measuring data types further relates to the identifications of the base stations received by the terminal.

35. (Previously Presented) The method according to claim 33, wherein the at least one of the plurality of locating procedures estimates the position of the terminal corresponding to the barycenter coordinates of a coverage sub-area of said base station defined depending on the distance from said base station to the terminal estimated depending on said parameter and an uncertainty value, the uncertainty value being defined depending on the distances from said barycenter to all points of the sub-area, and the at least one of the plurality of measuring data types further relates to at least one radioelectric or performance parameter of the signal transmitted from said base station and depending on the distance from said base station to the terminal.

36. (Previously Presented) The method according to claim 34, wherein the at least one of the plurality of locating procedures estimates the position of the terminal corresponding to the barycenter coordinates of a coverage sub-area of the base station by which the terminal is served, defined depending on the distances from said base stations to the terminal and estimated depending on said parameters and an uncertainty value, the uncertainty value being defined depending on the distances from said barycenter to all points of the sub-area, and the at least one of the plurality of measuring data types further relates to at least one radio-electric or performance parameter transmitted from said server base station and depending on the distance from said base station to the terminal and at least one radio-electric or performance parameter of the signal transmitted from received base stations and depending on the distance from said base stations to the terminal.

37. (Currently Amended) A processing system for locating a terminal in a local wireless telecommunications network by providing a location estimation of the terminal, wherein the network comprises a plurality of base stations that provide services on a plurality of coverage areas and the processing system is located remotely from the terminal and the plurality of base stations, comprising:

storage modules for storing a plurality of configuration data parameters and a plurality of measuring data types acquired from the terminal or the network and indicating whether the terminal belongs to a subset of said coverage areas; and

a locating processing module that associates each of a plurality of locating procedures with a different combination of at least one of the plurality of configuration data parameters and at least one of the plurality of measuring data types, and that performs one of the plurality of locating procedures related to a selected combination to provide the location estimation, wherein each of the plurality of locating procedures corresponds to an accuracy value of the location estimation.

38. (Previously Presented) A local wireless telecommunications network, comprising a processing system for locating a network terminal according to claim 37.

39. (Previously Presented) A telecommunications network adapted to perform the method according to claim 21.

40. (Previously Presented) A computer-readable medium storing instructions for execution by a processing system, the instructions comprising one or more code

modules that when executed by the processing system perform a method for locating a terminal in a local wireless telecommunications network according to claim 21.